

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application.

1. (previously presented) A process for monitoring, comprising:
accessing a method;
determining whether to modify said method, said step of determining whether to modify said method includes determining whether said method calls another method; and
modifying said method for a particular purpose if said method calls another method.
2. (currently amended) [[A]] The process according to claim 1, wherein:
said step of determining whether to modify said method includes determining whether said method is non-synthetic; and
said step of modifying includes modifying said method if said method is non-synthetic and said method calls another method.
3. (currently amended) [[A]] The process according to claim 1, wherein:
said step of determining whether to modify said method includes determining whether said method has an access level of public or package; and
said step of modifying includes modifying said method if said method has said access level of public or package and said method calls another method.
4. (cancelled)
5. (currently amended) [[A]] The process according to claim 1, wherein:
said step of determining whether to modify said method includes determining whether said method is non-synthetic and has an access level of public or package; and

said step of modifying includes modifying said method if said method is non-synthetic, has said access level of public or package, and said method calls another method.

6. (currently amended) [[A]] The process according to claim 1, wherein:

said step of determining whether to modify said method includes determining whether said method can be called by a sufficient scope of one or more other methods, said method has an access level, said determining whether said method can be called by a sufficient scope of one or more other methods is based on said access level of said method; and

said step of modifying said method includes modifying said method if said method can be called by said sufficient scope of one or more other methods and said method calls another method.

7. (currently amended) [[A]] The process according to claim 1, wherein:

said step of modifying includes modifying object code.

8. (currently amended) [[A]] The process according to claim 1, wherein:

said step of modifying includes adding a tracer for said method.

9. (currently amended) [[A]] The process according to claim 1, wherein:

said step of modifying includes adding a timer for said method.

10. (currently amended) [[A]] The process according to claim 1, wherein:

said step of modifying includes adding exit code and start code to existing object code.

11. (currently amended) [[A]] The process according to claim 10, wherein:

said start code starts a tracing process;

said exit code stops said tracing process;

said exit code is positioned to be executed subsequent to original object code;

said step of adding exit code includes adding an instruction to jump to said exit code from said original object code;

said step of adding exit code includes adding an entry in an exceptions table; and
said step of adding an entry in said exceptions table includes adding a new entry into said exceptions table for said method, said new entry indicates a range of indices corresponding to said original object code, said new entry includes a reference to said exit code and said new entry indicates that said new entry pertains to all types of exceptions.

12. (currently amended) [[A]] The process according to claim 1, wherein:
said particular purpose is to add a first tracer.

13. (previously presented) A process for monitoring, comprising:
determining which methods of a set of methods call one or more other methods; and
using a first tracing mechanism for said methods determined to call one or more other methods without using said first tracing mechanism for methods not determined to call one or more other methods.

14. (currently amended) [[A]] The process according to claim 13, wherein:
said step of determining includes determining whether said methods are non-synthetic; and
said step of using includes using said first tracing mechanism if said methods are determined to be non-synthetic and said methods call one or more other methods.

15. (currently amended) [[A]] The process according to claim 13, wherein:
said step of determining includes determining whether said methods have an access level of public or package; and
said step of using includes using said first tracing mechanism if said methods are determined to have said access level of public or package and said methods call one or more other methods.

16. (cancelled)

17. (currently amended) [[A]] The process according to claim 13, wherein:
said step of determining includes determining whether said methods are non-synthetic and have an access level of public or package; and

said step of using includes using said first tracing mechanism if said methods are non-synthetic, have said access level of public or package, and said methods call one or more other methods.

18. (currently amended) [[A]] The process according to claim 13, wherein:
said step of determining includes determining whether said methods can be called by a sufficient scope of one or more other methods; and

said step of using includes using said first tracing mechanism if said methods can be called by said sufficient scope of one or more other methods and said methods call one or more other methods.

19. (currently amended) [[A]] The process according to claim 13, wherein:
said step of using a first tracing mechanism includes adding and using timers for said methods.

20. (currently amended) [[A]] The process according to claim 13, wherein:
said step of using a first tracing mechanism includes modifying existing object code to add said first tracing mechanism.

21. (currently amended) [[A]] The process according to claim 20, wherein:
said first tracing mechanism includes timers for said methods.

22. (previously presented) One or more processor readable storage devices having processor readable code embodied on said processor readable storage devices, said processor readable code for programming one or more processors to perform a process comprising:

determining which methods of a set of methods to modify, said step of determining includes

determining whether said methods call one or more other methods; and

modifying for a particular purpose those methods that are determined to call one or more other methods.

23. (currently amended) The one [[One]] or more processor readable storage devices according to claim 22, wherein:

said step of determining includes determining whether said methods are non-synthetic; and

said step of modifying includes modifying said methods if said methods are determined to be non-synthetic and said methods call one or more other methods.

24. (currently amended) The one [[One]] or more processor readable storage devices according to claim 22, wherein:

said step of determining includes determining whether said methods have an access level of public or package; and

said step of modifying includes modifying said methods determined to have said access level of public or package and said methods call one or more other methods.

25. (cancelled)

26. (currently amended) The one [[One]] or more processor readable storage devices according to claim 22, wherein:

said step of determining includes determining whether said methods are non-synthetic and have an access level of public or package; and

said step of modifying includes modifying said methods if said methods are determined to be non-synthetic, have said access level of public or package, and said methods call one or more other methods.

27. (currently amended) The one [[One]] or more processor readable storage devices according to claim 22, wherein:

said step of determining includes determining whether said methods can be called by a sufficient scope of one or more other methods; and

said step of modifying includes modifying said methods if said methods can be called by said sufficient scope of one or more other methods and said methods call one or more other methods.

28. (currently amended) The one [[One]] or more processor readable storage devices according to claim 22, wherein:

said step of modifying includes modifying existing object code.

29. (currently amended) The one [[One]] or more processor readable storage devices according to claim 22, wherein:

said step of modifying includes adding tracers.

30. (currently amended) The one [[One]] or more processor readable storage devices according to claim 22, wherein:

said step of modifying includes adding timers.

31. (cancelled)

32. (currently amended) The one [[One]] or more processor readable storage devices according to claim 31, wherein:

said start code starts a tracing process;

said exit code stops said tracing process;

said exit code is positioned to be executed subsequent to original object code;

said step of adding exit code includes adding an instruction to jump to said exit code from said original object code;

said step of adding exit code includes adding an entry in an exceptions table; and

said step of adding an entry in said exceptions table includes adding a new entry into said exceptions table for said method, said new entry indicates a range of indices corresponding to said

original object code, said new entry includes a reference to said exit code and said new entry indicates that said new entry pertains to all types of exceptions.

33. (previously presented) One or more processor readable storage devices having processor readable code embodied on said processor readable storage devices, said processor readable code for programming one or more processors to perform a process comprising:

determining whether to trace a method, said step of determining includes determining whether said method calls another method; and

tracing said method for a particular purpose if said method calls another method.

34. (currently amended) The one [[One]] or more processor readable storage devices according to claim 33, wherein:

said step of determining includes determining whether or not said method is flagged by a compiler as being [[non-]]synthetic; and

said step of tracing includes tracing said method if said method is ~~determined to be not~~ flagged by said compiler as being [[non-]]synthetic and said method calls another method.

35. (currently amended) The one [[One]] or more processor readable storage devices according to claim 33, wherein:

said step of determining includes determining whether said method has an access level of public or package, an access level of public indicates that a method can be called by a method in a class of any parentage, an access level of package indicates that a method can be called by methods in classes in the same package regardless of parentage; and

said step of tracing includes tracing said method if said method is determined to have said access level of public or package and said method calls another method.

36. (cancelled)

37. (currently amended) The one [[One]] or more processor readable storage devices according to claim 33, wherein:

said step of determining includes determining whether said method is non-synthetic and has an access level of public or package, said access level is one of a plurality of access levels in a JAVA programming language; and

said step of tracing includes tracing said method if said method is determined to be non-synthetic, have said access level of public or package, and said method calls another method.

38. (currently amended) The one [[One]] or more processor readable storage devices according to claim 33, wherein:

said step of tracing includes timing said method.

39. (previously presented) An apparatus capable of monitoring, comprising:
means for determining whether a method calls another method; and
means for tracing said method for a particular purpose only if said method calls another method.

40. (previously presented) An apparatus capable of monitoring, comprising:
a storage device; and
one or more processors in communication with said storage device, said one or more processors perform a process comprising:

accessing a method,

determining whether said method calls one or more different methods and can be called by a sufficient scope of one or more other methods, and

tracing said method for a particular purpose if said method calls one or more different methods and can be called by a sufficient scope of one or more other methods.

41. (currently amended) [[An]] The apparatus according to claim 40, wherein:
said step of determining includes determining whether said method is non-synthetic; and

said step of tracing includes tracing said method if said method is determined to be non-synthetic and said method calls one or more different methods.

42. (currently amended) [[An]] The apparatus according to claim 40, wherein:
said step of determining includes determining whether said method has an access level of public or package; and

said step of tracing includes tracing said method if said method is determined to have said access level of public or package and said method calls one or more different methods.

43. (cancelled)

44. (currently amended) [[An]] The apparatus according to claim 40, wherein:
said process further includes modifying existing object code for said method in order to add a first tracing mechanism.

45. (currently amended) [[An]] The apparatus according to claim 44, wherein:
said first tracing mechanism includes a timer.

46. (currently amended) [[An]] The apparatus according to claim 40, wherein:
said step of tracing includes timing said method.

47. (currently amended) A process for monitoring, comprising:
accessing a method;
determining whether said method is complex, said step of determining includes determining that said method is complex if said method satisfies at least one of the following criteria:
said method calls another method;
said method has an access level that is either public or package; or
said method is not flagged by a compiler as being synthetic; and

~~modifying~~ adding a tracer to said method ~~for a particular purpose~~ only if said method is determined to be complex.

48. (currently amended) [[A]] The process according to claim 47, wherein:
said step of determining includes determining that said method is complex if said method is not flagged by said compiler as being [[non-]]synthetic and said method calls another method.

49. (currently amended) [[A]] The process according to claim 47, wherein:
said step of determining includes determining that said method is complex if said method has an access level of public or package, said method is not flagged by said compiler as being synthetic, and said method calls another method.

50. (cancelled)

51. (currently amended) [[A]] The process according to claim 5, wherein:
said step of modifying includes adding a tracer for said method.

52. (currently amended) [[An]] The apparatus according to claim 40, wherein:
said step of determining includes determining whether said method is non-synthetic and whether said method has an access level of public or package; and
said step of tracing includes tracing said method if said method is determined to be non-synthetic, said method is determined to have an access level of public or package, and said method calls one or more different methods.

53. (New) The process of claim 47, wherein said step of determining includes determining that said method is complex if said method satisfies at least two of said criteria.

54. (New) The process of claim 47, wherein said step of determining includes determining that said method is complex if said method calls another method.